

# INDONESIA: ENVIRONMENT, SCIENCE, TECHNOLOGY, AND HEALTH HIGHLIGHTS MAY 2008

### IN THIS ISSUE:

- ➤ Government Phasing out Large-Scale AC Units
- Papua Signs USD30 Million Forest Carbon Deal
- Reclamation for an Integrated New City in Tangerang
- > Oil Palm Threatens Sentarum Lake National Park
- Orangutans Close to Extinction
- Rare Javan Rhino Caught on Video
- Sumatran Tiger Population Critical
- Legal Reform Initiative Seeks to Protect Habitat for Orangutans
- Mangrove Planting in Surabaya
- Lax Enforcement and High Waste Treatment Costs Blamed for Continued Dumping
- Mushroom Farmers Switch from Kerosene to Firewood
- ► BPPT Developing Open Source Software
- Nuclear Technology in High School Curriculum
- Tackling HIV Infection Rates Among Surabaya's Children
- ➤ No Blood Transfusion Facilities in Half of Country

#### **ENVIRONMENT:**

## Government Phasing out Large-Scale AC Units

According to Tri Widayati, Director of Ozone Protection of the State Ministry of Environment (MOE), most operators of industrial-size chilling/air-conditioning units will have replaced those units with new ones that use environmentally friendly Freon, such as hydrochlorofluorocarbon (HCFC) 123 and hydrofluorocarbon (HFC) 134, by the end of June 2008. The MOE says that only 400 large-scale AC units remain in operation. The Government of Indonesia (GOI) banned the further importation of chlorofluorocarbon (CFC) 11 and CFC 12 after January 1, 2008 to meet its obligations under the Montreal Protocol. This will lead to a gradual phase-out of older AC units. The MOE is helping to provide soft loans to companies to finance the replacement of older units. The Ministry is also working with voluntary associations to disseminate information to the public about the transition process.

### Papua Signs USD30 Million Forest Carbon Deal

Papua has signed a carbon deal worth up to USD 30 million for 100,000 hectares of forestland. On May 13, Governor of Papua Barnabas Suebu signed a Memorandum of Understanding with New Forests Asset Management (NFAM) Pty Ltd. During the following two months, NFAM and the Papua Provincial Government will do a preliminary survey to identify three locations for this carbon project. At the end of 2008, Papua will receive USD 10 million of guaranteed revenue for the first five years and receive dividends totaling up to USD 20 million over the same period. NFAM is collaborating with Generation Investment Management, owned by former U.S. Vice President Al Gore.

## Tangerang Plans New Integrated City on Reclaimed Land

On May 15, Head of Tangerang Land Use Office Didin Samsudin confirmed that Tangerang Regency would reclaim 9,000 hectares of its northern coastal areas for a planned new "integrated" city. The Tangerang Regent has already issued Local Regulation (Perda) No. 8 of 2007 on Reclamation. This new development will contain hotels, a marina, a business center, residential areas, and an integrated container terminal and port. The new city will cover approximately 8,000 hectares and cost Rp. 20 trillion or USD 1.3 billion. Tangerang is about 21 km from Jakarta.

#### Oil Palm Threatens Sentarum Lake National Park

Budi Suriansyah, the Head of Danau Sentarum National Park, says that the palm oil plantation in the Kapuas Hulu region of West Kalimantan threaten the 132,000-hectare park's ecosystem, which is dependent on Betung Kerihun National Park. The development of palm oil plantations as well as illegal logging is causing water pollution, and local fishers are finding it increasingly difficult to find local endemic fish such as jelawat and arwana. There are 11 palm oil plantation companies and 9

subsidiaries of PT Sinar Mas, operating on 160 thousand hectares in areas bordering Betung Kerihun National Park.

# Orangutans Close to Extinction

On May 8, the Executive Director of the Center for Orangutan Protection (COP) stated that, based on a COP study in Central Kalimantan, orangutans will disappear from the region within 2-3 years. The investigation found 242 palm oil plantations with activities that having an impact on orangutans and their habitat. According to COP, these companies include members of the Roundtable on Sustainable Palm Oil (RSPO), such as Wilmar, IOI and Agro Group. In 2004, a Population and Habitat Viability Assessment (PHVA) reported that there were 58,575 orangutans left in Borneo, with an annual decrease in population of 9 percent leading to extinction by 2015. Darori, Director General for Forest Protection and Nature Conservation, is skeptical of the investigation's projections, and emphasizes that the government will not allow the conversion of natural forest to other purposes such as palm oil cultivation.

# Rare Javan Rhino Caught on Video

At the end of May, a video recorder installed by Ujung Kulon National Park and the World Wide Fund for Nature-Indonesia (WWF-Indonesia) caught footage of the extremely rare Javan Rhinoceros (Rhinoceros sondaicus). Speaking about the incident on May 29, Agus Priambudi, Head of Ujung Kulon National Park, said the recording would help researchers and conservationists learn more about the Javan rhino's behavior, as well as assist efforts to reduce threats to the remaining population. The Java rhino is the rarest among five rhino species in the world. There are only an estimated 50-60 Java rhinos in Ujung Kulon National Park. The Java rhino is on the International Union for Nature Conservation's "Red List" of endangered species.

#### Sumatran Tiger Population Critical

On May 25, the Coalition for Protected Animal Monitoring stated that there were approximately 250 Sumatran tigers (panthera tigris Sumatrae) left in the wild. The decrease in this species' population is due to hunting, conflict with humans, and illegal logging and land clearing leading to the fragmentation of its habitat. Poachers hunt the animal for its skin, bones, fang/tooth and claws. Tiger skins sell for approximately 3-5 million Rupiah (USD 322-537) apiece in local markets and up to USD 3,300 in international markets. Although Law No. 5 of 1990 on Natural Resources Conservation and Ecosystem protects this species, enforcement of the law is weak.

#### Legal Reform Initiative Seeks to Protect Habitat for Orangutans

The Orangutan Conservation Services Program (OCSP) and Wildlife Conservation Society (WCS) launched a media campaign in late May, to commemorate World Environment Day, in order to draw attention to the urgency of legal protection for

orangutan habitat and to support survival of orangutans in the wild. WCS is spearheading a policy reform effort that seeks to protect habitat of endangered species from conversion to non-forest land uses. In Indonesia today, it is illegal to kill an orangutan but it is still legal to convert the little remaining orangutan habitat to non-forest uses. Habitat conversion effectively eliminates whole populations of orangutans and other critically endangered species as their habitat becomes fragmented and deforested.

### Mangrove Planting in Surabaya

On May 11, people from various organizations planted 8,000 mangroves along the seashore at Wonorejo in eastern Surabaya. Wonorejo is poised to become a center for mangrove research, cultivation, and tourism. The Surabaya city government is actively restoring mangrove forests in eastern Surabaya. Illegal logging has destroyed at least 40 percent of a total 6,000 hectares of mangrove forest near Wonorejo. According to the head of Wonorejo Mangrove Farming Association, various groups in eastern Surabaya have planted at least 25,000 more mangrove trees this year than last year. Unfortunately, last year's mangroves were poorly protected. For example, 4,000 mangroves planted in the Kenjeran beach area in January had died by the end of May, due to high ocean waves and poor treatment.

### Lax Enforcement and High Waste Treatment Costs Blamed for Continued Dumping

At least 16 companies in East Java have disposed of industrial waste in the Brantas River through underground pipelines or during the heavy rainy season through open ditches. The companies have waste treatment facilities but prefer to cut costs by dumping untreated waste, according to Purnawan, a lecturer at Brawijaya University and a member of East Java Walhi, an environmental NGO.

The phenol content of industrial waste these companies are dumping in the Brantas is dangerously high, according to Purnawan. Just three hours south of Surabaya in Malang, waste from paper and cassava-processing plants has reportedly resulted in serious pollution and a major fish kill in the lake behind the Sutami Dam. Local media report that Malang's city government is reluctant to take action as paper factories are a major contributor to regional revenue.

#### Mushroom Farmers Switch from Kerosene to Firewood

Mushroom farmers in Karawang, West Java, are switching from kerosene to firewood because of the high cost and scarcity of kerosene. Mushroom farmers use fuel to boil water and use the evaporated water to regulate the level of humidity required for mushroom growth. Kerosene's retail cost has increased from 2,310 Rupiah (USD 0.25) to between 2,500-3,000 Rupiah (USD 0.27-0.32), making the price of firewood relatively cheaper. During a planting period of one month, the farmers require on average 80-120 liters of kerosene or three cubic meters of firewood. With the current kerosene price, the farmers' production costs are between 200,000-300,000 Rupiah, but only 150,000 Rupiah if using firewood. Besides the shift by many farmers to firewood, others have closed

down their mushroom production houses altogether.

#### **SCIENCE AND TECHNOLOGY:**

## BPPT Developing Open Source Software

The Head of the Information and Computer Systems Division of Indonesia's Agency for Technology Research and Application (BPPT) announced that BPPT is developing several computer applications using Free Open Source Software (FOSS) in order to reduce dependence on proprietary systems. Applications currently in development include e-office (Kantaya), e-learning (Kutahu), and Local Management Information System (Simda) software. BPPT is assisting several local governments (Jembrana, Pekalongan, Banyuwangi, Kuala Kapuas and Sawah Lunto) to implement FOSS-based applications. By 2014, BPPT plans to develop FOSS-based applications for computer driver and kernel technologies, mining data programs, Indonesian language processing, simulation and computerization.

# Nuclear Education in High School Curriculum

On May 2, Dr. Taswanda Taryo, Deputy Chairman for R&D Productivity and Public Acceptance of Nuclear Science and Technology, BATAN (National Nuclear Energy Agency), announced plans for a program to include education on nuclear technology in school curricula, especially high schools. Eko Madi, Head of the Subdivision for Nuclear Energy Science and Technology Dissemination, BATAN, explained that BATAN and the Ministry of Education would establish an expert team to begin drafting physics, chemistry, and biology curricula on nuclear technology. In addition, BATAN is conducting outreach to educate teachers, students, and NGOs about nuclear technology. BATAN will also establish three Centers for Nuclear Education and Information, including one in Jepara (Central Java), which is close to Muria Bay, the location for a proposed nuclear plant.

### **HEALTH:**

### Tackling HIV Infection Rates Among Surabaya's Children

The Surabaya City Health Department announced that 37 babies in Surabaya contracted HIV/AIDS between January and March 2008. At a workshop on HIV/AIDS, Surabaya's Vice Mayor, Arief Afandi, confirmed that HIV/AIDS cases are spreading in all 31 districts in Surabaya. The Surabaya City government will take a new approach to the problem by training students to be HIV/AIDS cadre who will provide information and training to their peers. The Surabaya City government will also involve more children and students in future HIV/AIDS workshops. So far, it has selected 10 junior high schools and 10 senior high/vocational schools in Surabaya as HIV/AIDS test sites for this campaign.

### No Blood Transfusion Facilities in Half of Country

During a public hearing before the Jakarta regional parliament on May 12, Dr. Ratna Rosita, Director of Basic Medical Services and Nutrition of the Ministry of Health, stated that Indonesia lacks Blood Transfusion Units (UTDs) in 226 regions. Ministry of Health statistics (2006) show that only 231 of 457 regencies/cities in Indonesia have UTDs, including those operated by the Indonesian Red Cross (PMI), provincial governments and hospitals. PMI's Chairman Mari'e Muhammad and Adang Dorodjatun, Chairman of Indonesia Blood Donors, also attended the public hearing. PMI currently has 212 UTDs, of which 24 percent are located within hospitals and 76 percent outside of hospitals.

\* \* \*